

ABSTRACT OF THE DISCLOSURE

There is disclosed a flexible sheet structure having improved conformability yet remaining strong and robust. The structure is made up of a plurality of modules that allow relative rotation in both an axis parallel to the plane and perpendicular to the plane of the sheet when laid flat. This allows the density of the sheet to be locally or globally changed so that improved conformability around complex shapes is provided. There is also disclosed a means for locking and unlocking the modules of the sheet using a locking material in each connection that is activated by the external addition of energy (e.g. heat energy).